

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Federal-State Joint Board on
Universal Service

Forward-Looking Mechanism
for High Cost Support for
Non-Rural LECS

CC Docket No. 96-45

CC Docket No. 97-160

**COMMENTS OF BELL ATLANTIC¹ ON
III.C.1 PLATFORM**

In the attached comments, Bell Atlantic provides its views and recommendations on platform design for developing customer locations in a proxy model. The deficiencies in the current Hatfield and BCPM models in determining the distribution of customers and the numbers of lines in each geographic area are a product of the lack of data at the level of census block groups ("CBGs") or smaller geographic areas. The problems with the existing models can be resolved by disaggregating costs no lower than the wire center. The local exchange carriers have reliable data with which to assign customers and to count lines by wire center. This would produce a more reliable estimate of costs

¹ The Bell Atlantic telephone companies ("Bell Atlantic") are Bell Atlantic-Delaware, Inc.; Bell Atlantic-Maryland, Inc.; Bell Atlantic-New Jersey, Inc.; Bell Atlantic-Pennsylvania, Inc.; Bell Atlantic-Virginia, Inc.; Bell Atlantic-Washington, D.C., Inc.; Bell Atlantic-West Virginia, Inc.; New York Telephone Company; and New England Telephone and Telegraph Company.

whether the Commission adopts a proxy model or, as recommended by Bell Atlantic, an engineering model of actual forward-looking costs.

Respectfully submitted,

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Dated: September 2, 1997

III.C.1 Platform Design Components and Input Values - Customer Location

a. Geographic Unit (paras. 39-40)

Issue: In the *Universal Service Order*,² the Commission concluded that the mechanism for determining the cost of supported services should use a geographic unit no larger than a wire center, or a smaller area such as a census block group ("CBG"), census block ("CB"), or grid cell, if feasible. In the *Further Notice*,³ the Commission seeks comment on whether it should adopt, as the geographic unit for cost calculation, an area smaller than a CBG.

Response: The proxy models should not incorporate, as a geographic unit for cost calculation, an area smaller than a wire center. The wire center boundaries represent the true boundaries of the network as engineered to provide local service and, therefore, to provide universal service. Wire center boundaries agree with the local exchange areas that have been established to define the parameters of local service. As the Commission recognizes, using CBGs, CBs, or grid cell data may distort the true economic cost of provisioning service, since the model algorithm can allocate lines, and their associated costs, to the wrong wire center and/or the wrong telephone company network.⁴ CBG and CB boundaries do not agree with local exchange area boundaries, and many CBGs and

² Federal-State Joint Board on Universal Service, CC Docket No. 96-45, *Report and Order*, FCC 97-157, released May 8, 1997 ("*Universal Service Order*").

³ Federal-State Joint Board on Universal Service, Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket Nos. 96-45, 97-160, *Further Notice of Proposed Rulemaking*, FCC 97-256, released July 18, 1997 ("*Further Notice*").

⁴ See *Further Notice* at para. 49.

CBs appear in two or more local exchange areas. Mapping CBGs and CBs (and the customers within these areas) to the appropriate wire center is a difficult, if not impossible, task, since the model algorithms rely upon statistical data rather than engineering data. Line count estimates may also be inaccurate, since most companies do not keep track of access lines by CBG or CB. These problems could be eliminated by using the wire center/exchange area as the basic geographic unit.

b. Distribution of Customers (paras. 41-47)

Issue: The Commission tentatively decided that a clustering algorithm would more accurately distribute customers within some CBGs and would consequently generate more accurate estimates of loop length and, therefore, of the cost of the outside plant. The Commission also tentatively concluded that the selected mechanism should calculate population clusters' proximity to wire centers with more precision than the models currently permit. The Commission seeks comments on these tentative conclusions and on how BCPM's uniform distribution algorithm and Hatfield's clustering algorithm could be modified to provide more accurate information regarding the locations of customers. The Commission also seeks comment on how to improve both models' accuracy in assigning CBGs to serving wire centers.

Response: Both models attempt to design a proxy network based on various customer location assumptions and geographic characteristics in order to develop the cost of providing universal service. A model that would be simpler and that would better

approximate actual forward-looking costs would develop costs by wire center/exchange area using the actual number of access lines and their distances from the wire center.


c. Line Count (paras. 48-53)

Issue: The Commission notes that the methods used in the BCPM and Hatfield models to estimate the numbers of customer lines in each geographic area produce inaccurate total line counts, which must be reconciled with actual study area line counts through "closing factors." The Commission asks for comments on methods of improving the accuracy of line counts in each CBG, CB, or grid cell.

Response: The Commission should deal with this problem, as well as with the problems associated with estimating customer locations by CBGs or CBs, by using actual wire center/exchange area access line counts. Contrary to the Commission's assumption, the LECs can produce actual line counts by wire center. This would eliminate the need for "closing factors" to reconcile estimated line counts based on CBGs or CBs with actual line counts.

CERTIFICATE OF SERVICE

I hereby certify that copies of this pleading were mailed this date, first class postage prepaid, upon the persons listed on the attached service list.



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Dated: September 2, 1997

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